



ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

Environmental Health & Engineering

MEMORANDUM

DATE: February 18, 2020
FROM: Project Coordinator, DEHE
SUBJECT: Trip Report – Mertarvik – January 21-27 2020
TO: FOR THE RECORD

OBJECTIVE:

- Conduct inspections of PASS systems to identify and address system challenges post-freeze up
- Train Mertarvik homeowners on use and maintenance of the PASS system in homes not visited during previous trainings
- Survey homeowners in CCHRC-UICC homes about issues with household systems and experience living in the homes
- Collect data from homeowners in CCHRC-UICC homes about fuel and water use
- Collect signed homeowner agreements for the PASS units

ATTENDEES:

- Elizabeth (Liz) Wulbrecht, ANTHC
- Rachel Gold, ANTHC

FINDINGS AND ACCOMPLISHMENTS

On Tuesday, January 21, Jackie, Liz, and Rachel flew to Bethel on the 9:50 a.m. Alaska Airlines flight, arriving in Bethel at 11:00 a.m. Their scheduled charter with Yute Commuter Services to Mertarvik was on weather hold for the entire day and was canceled at 4:00 p.m. Liz and Rachel spent the night at the Bethel Long House Hotel and Jackie spent the night at the home of a friend in Bethel. At 3:30 p.m. on Wednesday, Liz and Rachel flew to Mertarvik on the Yute charter; landing at 4:30 p.m. Jackie was unable to fly to Mertarvik because of a commitment in Anchorage on Friday morning.

Between Wednesday evening and Friday evening, Rachel and Liz visited 19 of the 21 homes in Mertarvik to check each of the PASS systems, and collect homeowner information about issues with the homes, fuel use, water use, and community operations. In addition, most households signed the PASS homeowner agreements, except for David Kassaiuli and Marie Fairbanks, whose homes are unoccupied, John Charles who was not home, and Marie Carl. Most of the households identified issues with their home, such as separation of the trim between the floor and wall or wall and ceiling, drafty doors, and bubbling on the floor. A punch-list was compiled and sent to UICC and is included in the appendix.

There were no substantial issues with the PASS systems. No homes have experienced freeze-up or clogging of their lines. There were a few punch list items identified and addressed while Liz and Rachel were on site. Two UICC homes identified a smell from PASS in their entryway, which was rectified by applying grey duct sealant on the ducts connected from the PASS fans, as this had not been done prior to Liz and Rachel's visit. In addition, Mark and Mary George were still experiencing a very pungent urine smell in their closet from the PASS duct. This was also rectified by the application of grey duct sealant along the connection points of the aluminum ducting. Liz also verified that their line was not frozen. The Josephine John household's blue filter casings were broken. The unit froze while Thomas John was in Nome for a water plant training and the filter casings cracked. New filters will be ordered for the family.

Liz helped complete the setup of the David Kassaiuli PASS unit Tuesday evening and took photos for the Engineer of Record to inspect and sign off on.

Overall, homeowners are very happy with their PASS systems. However, around half of the households are still using a washbasin because, as they explained, "they do not want to waste water." Liz and Rachel explained that this is unhealthy, but a more targeted handwashing training should be implemented in the community. Liz trained Isaiah Fairbanks on PASS operations and maintenance. The Fairbanks house was the last occupied house in Mertarvik that had yet to be trained. Liz also trained an additional resident of another household, who wanted to help his family better understand the system.

All families but one were using the separating toilet in Mode #1 (drainage mode). On Monday morning, Bernice John alerted Liz and Rachel about a freeze-up issue in the Marie and Moses Carl household. Moses passed away on Wednesday and the family turned the heat off to preserve the body until the funeral on Saturday. The Carl family resides in one of the older Mertarvik homes, built in 2013. There is a bathtub separately plumbed from the PASS and it was filled with dirty brown water. It is unclear whether the Carl household is on honey bucket because of the amount of family and friends visiting from outside the community or because they believe their line is frozen. Follow-up with the family is required to determine the issue.

On Saturday morning, Liz and Rachel worked to complete a few PASS repairs and in the afternoon attended the funeral of Moses Carl. In the evening, the Carl family invited them to attend the community potluck and dance.

The two women planned to depart on Sunday, but were weathered in. They were able to fly out on Monday at approximately 3:00 p.m. and travel to Anchorage on the 8:50 p.m. Alaska airlines flight, arriving to Anchorage at approximately 9:44 p.m.

RECOMMENDATIONS & CONCLUSIONS

- Design and implement handwashing training in the school and with homeowners
- Follow up with the Carl household on honey bucket use
- Order Thomas John new filter casings


Elizabeth Wulbrecht

Appendices: Appendix I – Housing Punch-List

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Appendix I

Housing punch-list

Jimmy Charles (3S)

- ☐ Finish range hood fan installation and siding

Teddy Tom (4S)

- ☐ Cold air comes in under the stove
- ☐ Separation between walls and ceiling at plywood in bathroom
- ☐ House door not flush with doorframe; drafts come in.

Jeff and Lisa Charles (5S)

- ☐ Separation at ceiling opening up again
- ☐ Door has gap; not flush

Harry and Myra (7S)

- ☐ Draft through door
- ☐ Separation from floor in Arctic entryway
- ☐ Ceiling separating from wall in bathroom

Simeon Fairbanks (8S)

- ☐ Some small gaps between floor/walls/ceiling at plywood
- ☐ Drafts through the east facing windows

Bernice John (2N)

- ☐ Air blows in through the chimney pipe
- ☐ Bubbling on floors in the living room by the woodstove
- ☐ Separation between floor/walls in bedroom and Arctic entryway
- ☐ Door isn't flush in entryway à drafts blow in

Albertina Charles (3N)

- ☐ Separation between walls and ceiling at plywood

Nathan Tom (4N)

- ☐ Bubbling on Floor
- ☐ Separation between floor and walls at plywood (especially by kitchen counters)
- ☐ Door needs to be slammed to shut properly

David Tommy (6N)

- ☐ Door isn't flush - crack taped shut
- ☐ Woodstove will not start – smoke comes out into the house instead of going up chimney
- ☐ Some bubbling in the floors by the fridge and the bathroom

Teachers (10S)

- ☐ Separation between floor and walls in the Arctic entryway
- ☐ Wall trim stops short of ceiling
- ☐ Crack in the floor in the kitchen – significant enough that feet/furniture catch on it
- ☐ Drafts through the front door

Monica Kasayuli (5N)

- ☐ Crack in door, not flush
- ☐ Draft through east facing windows